

Work Order ID 76556

76556

Page 1

November-16-11 3:04:40 PM

Item ID: D205-634-041 *SWAP* Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Replacement Skidtube
 Start Date: 16/11/2011 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 02/12/2011 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: *Y L J* Date: *11/11/16* Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D2580-041	Rev.E								

100 0.00
100 DOCUMENT CONTROL
 DC Memo 0.00
 Document Control Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002 *005* *N/A* *[Signature]*

110 0.00
110 BENDING MACHINE - SKIDTUBES
 CNC Bend 1 Memo 0.00
 CNC Delta 100 Bender 1-Bend as per program D2580.C on CNC Bender and Folio 16
 2-Cut tubes as per Dwg. D2580
 3- scribe batch# in aft end of tube *1* *16* *SAD* *12-01-30*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 76556***76556***

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Item ID: D205-634-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 16/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 02/12/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:



Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120									
Skidtubes	Memo	0.00							
Skidtubes	1- Deburr ends and remove bending marks								
	2- Prepare tube for welding as per QSI 004								
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.00							
Quality Control									

 12-02-02 12-2-2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Replacement Skidtube

Stop ***NS2***

Start Date: 16/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 02/12/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

0.00

140

Skidtubes

Skidtubes

Memo

0.00

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R Aluminum Rod *11/19/12* *BE 12-02-02*

2-Grind welds on step as per Dwg D2580 *3B 12/02/07*

3-Weld spacers as per dwg D2580 *N/A*

3- *** *N/A* *** Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension.

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64" *7.4" From Most Fwd Saddle hole (REF ONLY)*
adjust stopper not to hit web. Debur

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

12-02-02

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Dart Aerospace Ltd

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N900040100

Setup Start ***NS1***

Stop ***NS2***

*** 1 ***

*** 1 ***

Reference:

Run Start *NR1*

Stop *NR2*

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

0.00

0.00

8-15^{0.00}
3200
8-45

FINISH TIME:

0.00

0.00

Quality Control

~~1XQ~~ m/l 12/02/08

1 of 11 12/02/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 16/11/2011 Start Qty: 1.00

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Cust Item ID:

Required Date: 02/12/2011 Req'd Qty: 1.00

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

0.00

200

HandFinish

0.00

Hand Finishing

Memo

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of

✓ Sikaflex on insert holes before installing wearplates

A/R Sikaflex-291 11119508Sikaflex expire date: 12/08

✓ 2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

✓ 3-Inspect for foreign object per QSI 024

✓ 4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive

A/R Sikaflex-291 11119508Sikaflex expire date: 12/08

✓ 5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: 111201251 0 24 12/02/08

W/O:		WORK ORDER CHANGES					
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Revision ID:

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Item Name: Replacement Skidtube

Start Date: 16/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 02/12/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC5- Inspect part completeness to step on W/O

0.00

210

QC

Memo

0.00

Quality Control

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

Enclog

220

Packaging

0.00

220

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location: _____

PPP Rev: _____

PPT 8062

12/2/10

230

QC21- Final Inspection - Work Order Release

0.00

230

QC

Memo

0.00

Quality Control

12/2/13

MF 12-02-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 76556

76556

Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30
KJ IPP Rev P 10.02.19
per PAR09-043 EC verified by:DD
IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q
10.12.01 as per chg003 DD ver:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D4202-1 Manufactured No

D4202-1

Spacer

77729

**

20 120202

Location

Loc Qty

Loc Code

LG002

492

66929

106

67129

196

67308

1

67430

140

72639

49

D2580-1 Manufactured No

D2580-1

205 Skidtube bent detail

110

Each

9.0000

**

SAG 120202

Location

Loc Qty

Loc Code

LG

9

72965

1

76174

2

76175

2

76423

2

76424

2

379389

1

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Work Order ID: 76556

76556

Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

D2576-3 Manufactured No

140 Each 110.0000 1 1

D2576-3

Step (maching detail)

**

BE12-02-02

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	110	
66156	10	
70883	50	
74136	50	

D2855 Manufactured No

200 Each 6.0000 1 1

D2855

Cap

**

B75074 (x1) MU 12/02/08

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP007	6	
65519	2	
65569	4	

AN3-5A Purchased No

200 Each 904.0000 2 2

AN3-5A

Bolt

**

MU 12/02/08

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST350	904	
115371	46	
117423	358	
<u>118626</u>	300	
119355	200	

AN960JD10L NAS1149D0332J Purchased No

200 Each 0.0000 2 2

***AN960JD10I ***

Washer

**

M119042 (x2) MU 12/02/08

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 76556

76556

Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

ALS7-1032-130

Purchased

No

200

Each

1,765.000

50

50

AI S7-1032-130

Insert

ALS4-1032-130

X

**

M119084(x50) M 12/02/08

Location

Loc Qty

Loc Code

ST281

113

117717

27

118966

86

ST282

1652

119530

1652

AN3C4A

Purchased

No

200

Each

1,949.000

50

50

AN3C4A

BOLT

**

M119749(x50) M 12/02/08

Location

Loc Qty

Loc Code

ST350

1949

117313

2

117688

5

117872

22

118112

16

118451

2

118838

962

119328

940

AN960C10L

NAS1149C0332

Purchased

No

200

Each

0.0000

50

50

*AN960C10I *

washer

X

**

M119736(x50) M 12/02/08

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR: Yes No** **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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Work Order ID: 76556

76556

Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3566-13 Manufactured No

200 Each 26.0000 1 1

D3566-13

Gasket

****** 1376947 (x1) 11/12/02/08

Location Loc Qty Loc Code

FP 25

73322 25

FP014 1

68341 1

D3566-5 Manufactured No

200 Each 26.0000 1 1

D3566-5

Gasket

****** 1376945 (x1) 11/12/02/08

Location Loc Qty Loc Code

FP002 26

74387 4

75069 22

D3566-1 Manufactured No

200 Each 25.0000 2 2

D3566-1

Gasket

****** 1377569 (x2) 11/12/02/08

Location Loc Qty Loc Code

FP002 23

74518 23

FP015 2

68924 2

D3564-11 Manufactured No

200 Each 1.0000 1 1

D3564-11

Wearshoe

****** 1376268 (x1) 11/12/02/08

Location Loc Qty Loc Code

FP019 1

73146 1

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Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
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Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

D3564-13 Manufactured No

200 Each 13.0000 1 1

D3564-13

Wearshoe

**

B 75045 (v1) 12/02/08

Location	Loc Qty	Loc Code
FP001	12	
73323	12	
FP017	1	
71594	1	

D3564-9 Manufactured No

200 Each 12.0000 1 1

D3564-9

Wearshoe

**

B 77 613 (v1) 12/02/08

Location	Loc Qty	Loc Code
FP	7	
73345	7	
FP019	5	
67590	4	
69943	1	

D3564-5 Manufactured No

200 Each 18.0000 1 1

D3564-5

Wearshoe

**

B 76269 (x1) 12/02/08

Location	Loc Qty	Loc Code
FG	2	
34806	2	
FP001	12	
74543	12	
FP019	4	
73330	4	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 16/11/2011

Required Date: 02/12/2011

Start Qty: 1.00

Required Qty: 1.00

D2594-3

Manufactured No

200 Each

672.0000 16 16

D2594-3

O-Ring, 205 Skidtube

**

ll 12/02/08

Location

Loc Qty

Loc Code

FP

474

65518

41

66952

135

73490

298

FP004

198

73490

198

x16

D2594-1

Manufactured No

200 Each

288.0000 16 16

D2594-1

Plug, 205 Skidtube

**

1377035 (x16) ll 12/02/08

Location

Loc Qty

Loc Code

FP

288

73401

288

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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LIST OF MATERIALS					PART NUMBER	DESCRIPTION
ITEM	QTY -041	QTY -045	QTY -047			
1	X				D2580-041	SKIDTUBE ASSEMBLY
2		X			D2580-045	SKIDTUBE ASSEMBLY
3			X		D2580-047	SKIDTUBE ASSEMBLY
4	1	1	1		D2500-1-190	EXTRUSION
5				16	D2570	BUSHING
6	1	1	1		D2576-3	STEP
7	20	24	25		D2579	SPACER
8	16	16	8		D2594-1	PLUG
9	16	16	8		D2594-3	O-RING
10	1	1	1		D2596	205 WEB
11	1	1	1		D2855	AFT CAP
12	1	1			D3564-5	WEARSHOE
13	1	1			D3564-9	WEARSHOE
14	1	1			D3564-11	WEARSHOE
15	1	1			D3564-13	WEARSHOE
16	2	2			D3566-1	GASKET
17	1	1			D3566-5	GASKET
18	1	1			D3566-13	GASKET
19			1		D4406-041	WEARPLATE ASSEMBLY
20			1		D4406-043	WEARPLATE ASSEMBLY
21	50	50			ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
22	50	50			AN3C4A	BOLT
23	2	2	2		AN3-5A	BOLT
24				8	AN4-45A	BOLT
25	50	50			NAS1149C0332R	WASHER (AN960C10L)
26	2	2	2		NAS1149D0332J	WASHER (AN980JD10L)
27				8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- MATERIAL: N/A
- FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ASSEMBLY (-041/-047) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT ASSEMBLY (-045) GREEN SANDEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: NONE
- WEIGHT: D2580-041 = 34.5 lbs
D2580-045 = 34.5 lbs
D2580-047 = 37.7 lbs
- WELDING PER DART QSI 004.
- INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.
- INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047)
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

RELEASED
2011-08-29

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WORK ORDER

NO. 76556 M.C.J

11/11/16

E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183	PH	07.04.05
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	98.08.26
B	AS MANUFACTURED	DS	96.12.02
A	NEW ISSUE	DS	96.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 1 OF 8
APPROVED	140	TITLE	SCALE
DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
DATE	11.06.21	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

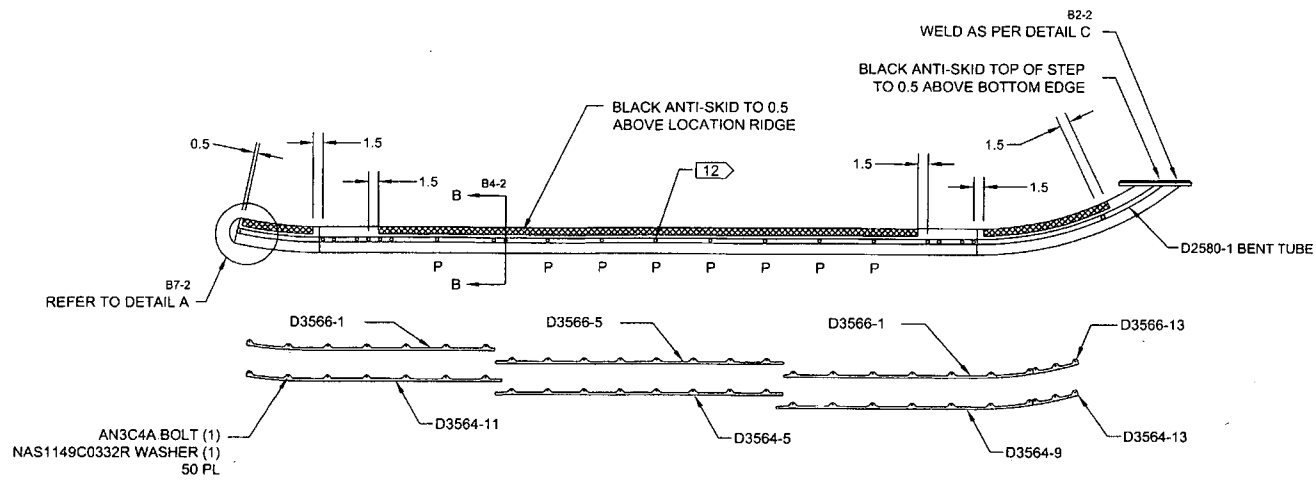
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

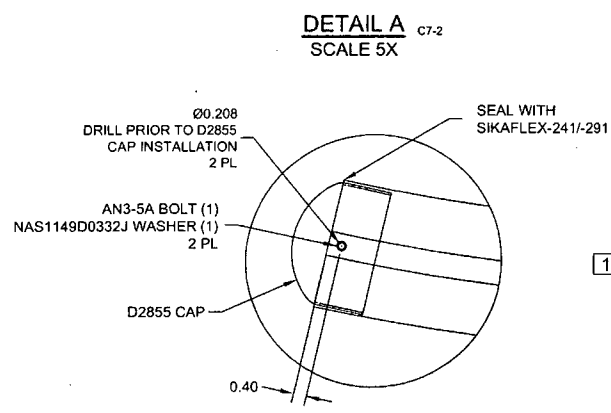
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

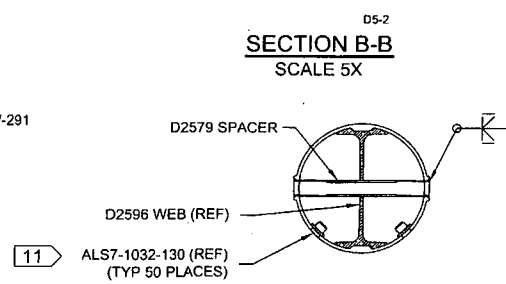
76556



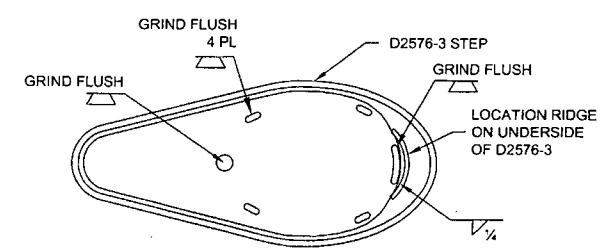
D2580-041 ASSEMBLY DETAIL



DETAIL A
C7-2
SCALE 5X



SECTION B-B
D5-2
SCALE 5X



DETAIL C
D3-2
SCALE 5X

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 2 OF 8
APPROVED	10	TITLE	SCALE
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

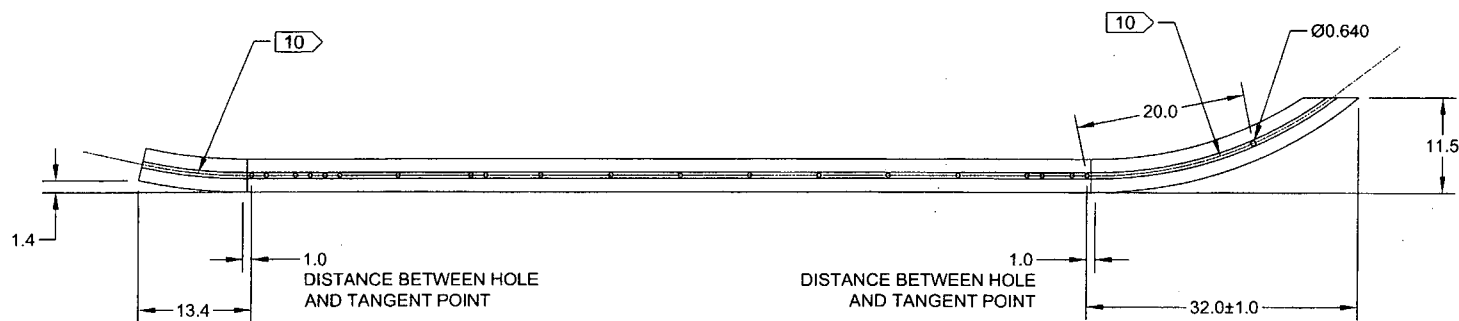
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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WY

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CHECKED	140	DRAWING NO.	REV. E
MFG. APPR.	140	D2580	SHEET 3 OF 8
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DE APPR.	140	205 SKIDTUBE ASSEMBLY	NTS
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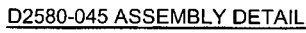
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

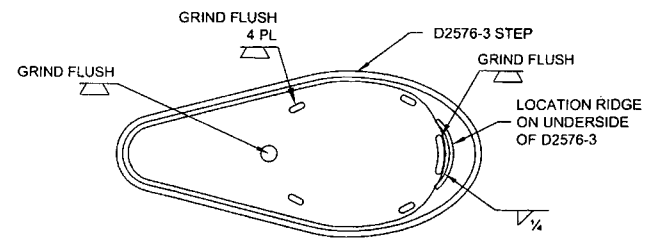
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DETAIL G D3-5
SCALE 5X



A horizontal number line with tick marks at 1, 2, 3, 4, 5, 6, 7, and 8. The numbers are placed above the tick marks. The segment between 1 and 2 is shaded gray.

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

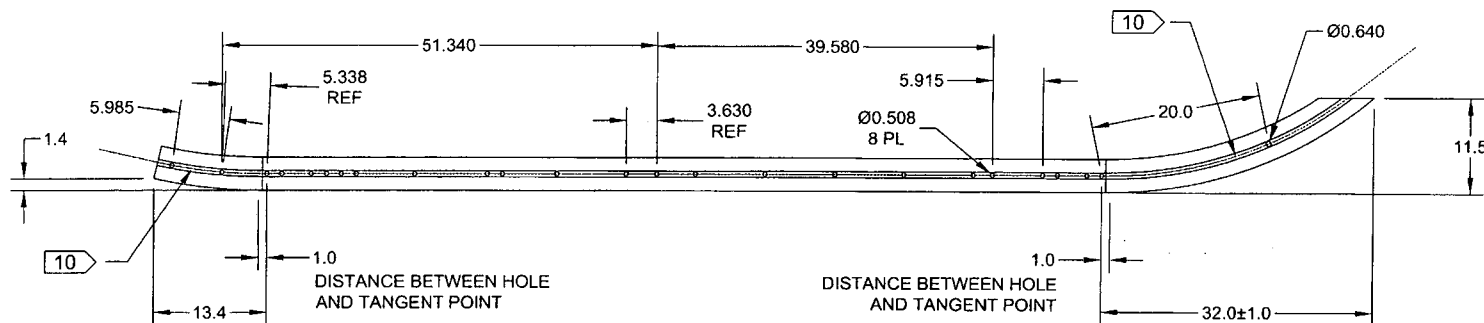
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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DESIGN	RF	DART AEROSPACE LTD	
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CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 5 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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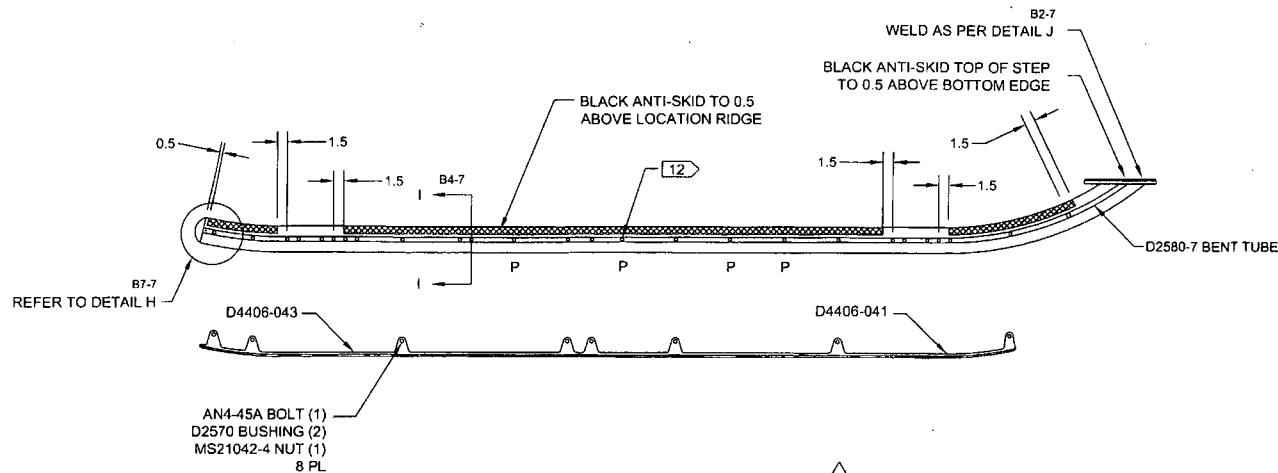
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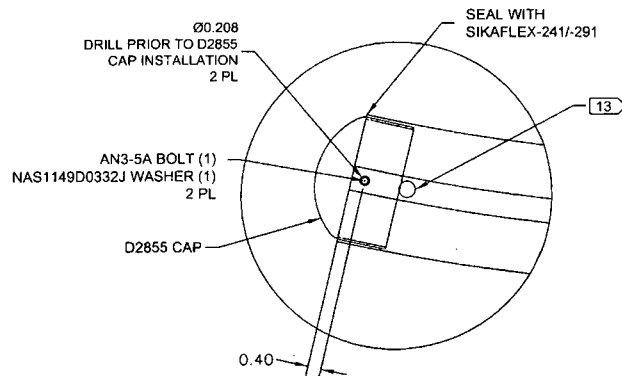
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

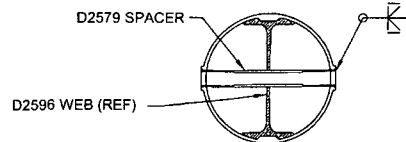
76556



DETAIL H C6-7
SCALE 5X



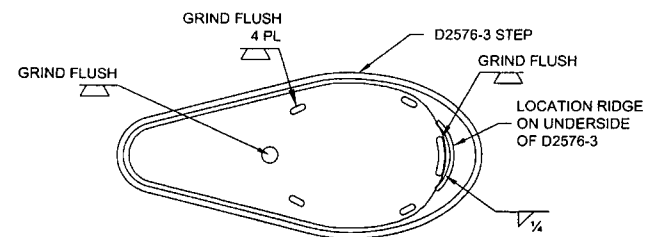
SECTION I-I D5-7
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (25 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DETAIL J D3-7
SCALE 5X



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MFG. APPR.	AP	D2580	SHEET 6 OF 8
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

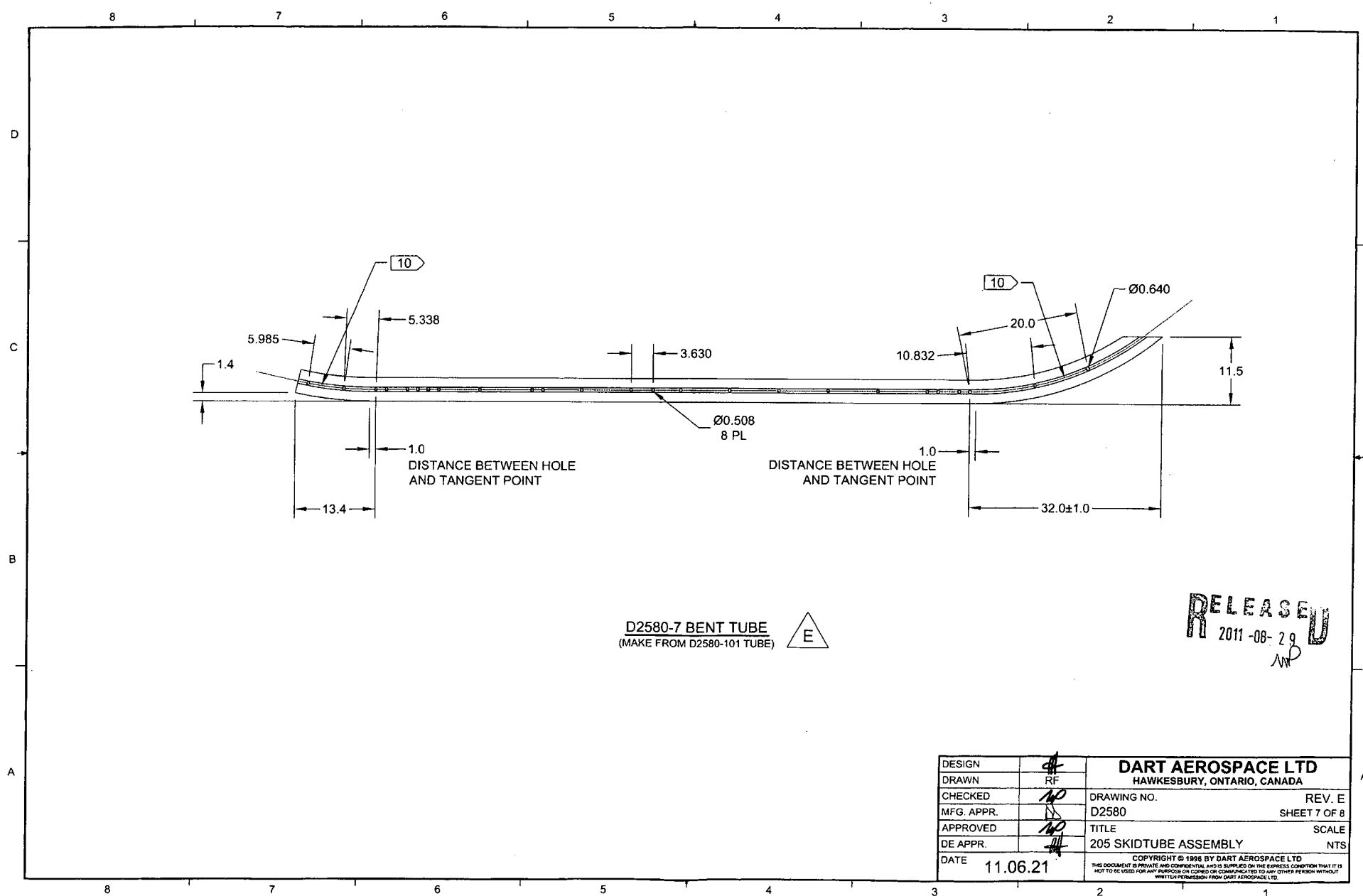
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)



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MFG. APPR.	RF	D2580	SHEET 7 OF 8
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

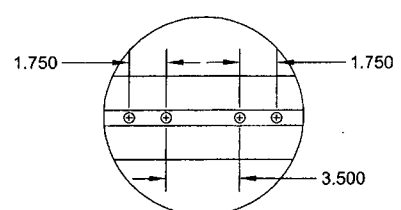
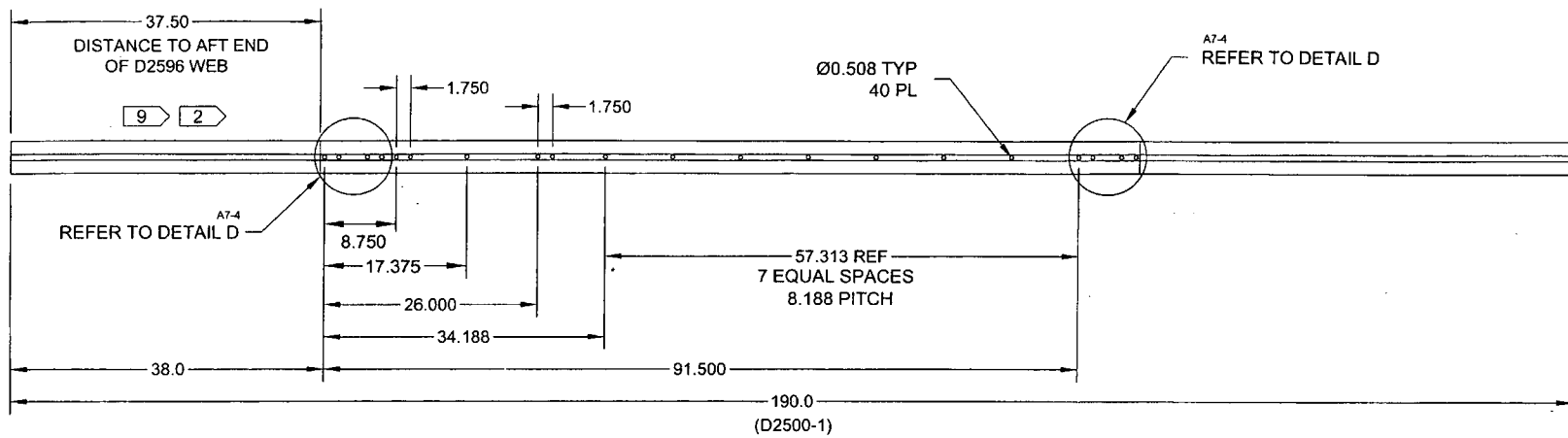
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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DETAIL D
D3-4
C7-4
SCALE 5X

D2580-101 TUBE

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DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AP	DRAWING NO.	REV. E
MFG APPR.	AP	D2580	SHEET 8 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	205 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries